

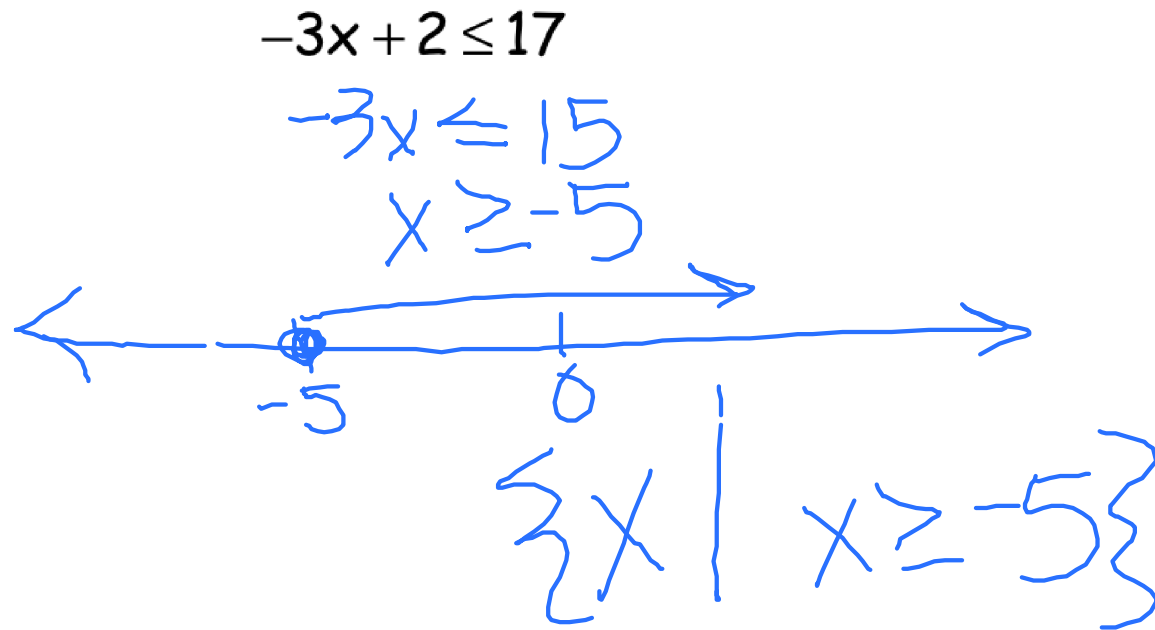
Unit 10

Day 1

Linear Inequalities

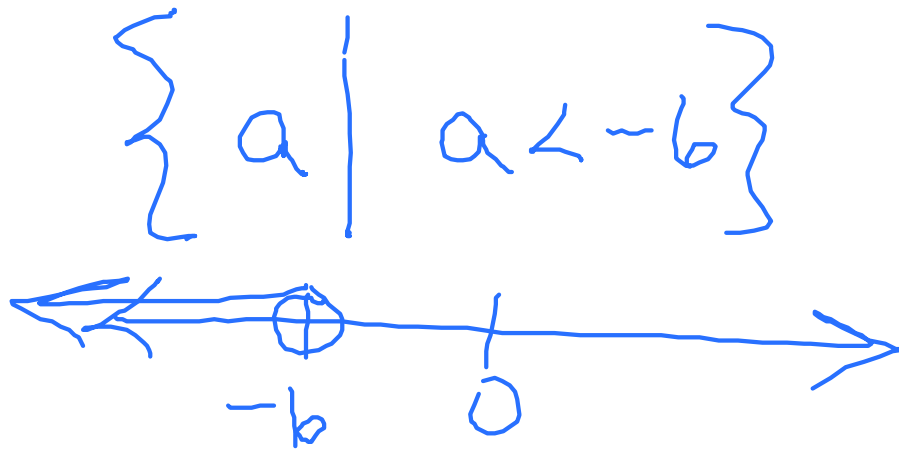
Section 2.7 in textbook

1) review:



Use solution set notation to state your answer and graph the solution.

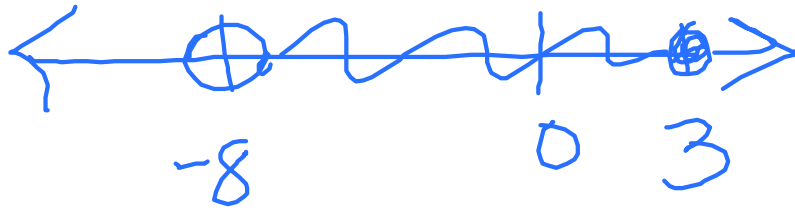
2) $a < -6$



Use solution set notation to state your answer and graph the solution.

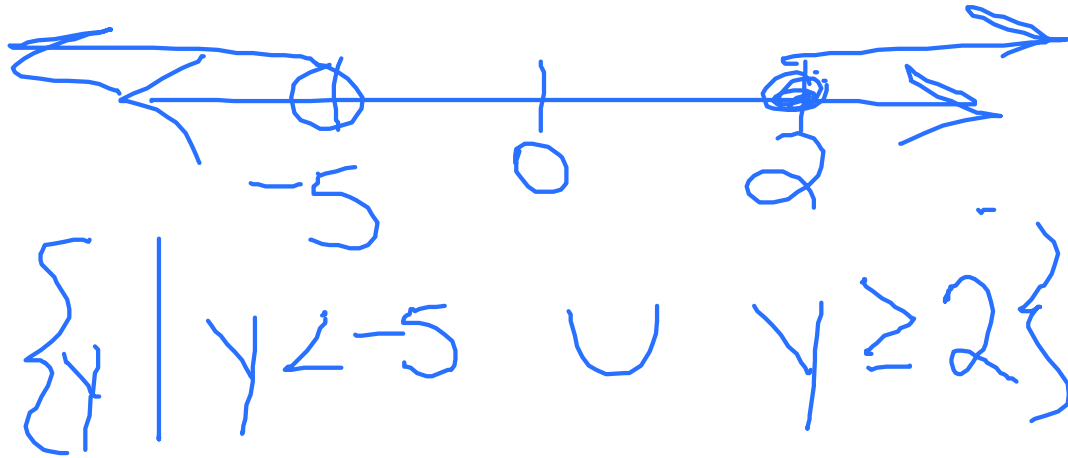
3) $-8 < m \leq 3$

$$m > -8 \quad \text{AND} \quad m \leq 3$$



$$\{m \mid -8 < m \leq 3\}$$

4) $y < -5$ or $y \geq 2$



5)



Inequality: $+3 \leq x < 5$

Interval Notation:

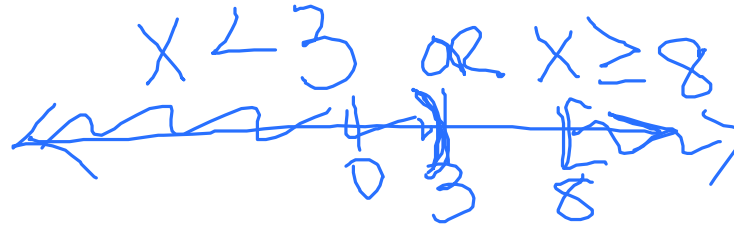
$[3, 5)$

$\{x \mid +3 \leq x < 5\}$

6)

$(-\infty, 3) \cup [8, \infty)$

Inequality:



7) Solve and write the solution in interval notation

$$2(m+5) - 3m + 1 \geq 5$$

$$2m + 10 - 3m + 1 \geq 5$$

$$-m + 11 \geq 5$$

$$-m \geq -6$$

$$m \leq 6$$



$$(-\infty, 6]$$

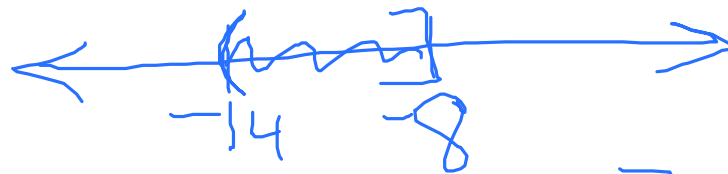
8) Solve and write the solution in interval notation

$$-12 < \frac{2r-8}{3} \leq -8$$

$$-36 < 2r-8 \leq -24$$

$$-28 < 2r \leq -16$$

$$-14 < r \leq -8$$



$$(-14, -8]$$

HW pg 145-146 1-10, 13-22 all